

ABSTRACT OF THE DISCLOSURE

The ventilating system includes evaporative cooling of the exhaust air before it enters a heat exchanger to cool incoming fresh outside air. A suction fan pulls exhaust air through the heat exchanger and, in combination with a flow restrictor, reduces the pressure on the exhaust air and augments the evaporative cooling. The use of a pusher fan to force outside air through the heat exchanger ensures that any leakage in the heat-exchanger results in outside air entering exhaust air and minimizing the chances of contamination by leaking exhaust air into the incoming fresh air. The heat exchanger is made economically by heat-forming cavities in relatively thick thermo-plastic sheets, interleaving them with other thermo-plastic sheets having separate gas flow conduit structures, and securing the sheets together. Preferably, the heat-exchanger is an opposed-flow heat-exchanger giving improved heat-transfer efficiency.

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